

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-26 (Canceled).

Claim 27 (New): A telemetry system for bi-directional communication of data between a well point and a surface terminal unit, configured to be used inside drilling or production strings, comprising:

data transmission and optional reception devices;

an active vehicle, configured to be equipped with plural automation levels, ranging from purely tele-operated to completely autonomous, for unwinding and pulling a connection line, configured to move inside the drilling or production string, or a passive vehicle, moved by a deploying cable and a winding/unwinding device, the passive vehicle including:

a winch of the line to be unwound or pulled;

means for supplying electric energy to the vehicle;

electronic control and communication devices;

anchoring devices configured to guarantee safe stoppage inside the pipe,

the vehicle being connected, by the deploying cable and a hooking/unhooking device, to the winding/unwinding device, configured to be situated inside a possible garage or outside the string;

a connection line, containing electric conductors and/or one or more optical fibers, of the transmission and optional reception devices between a well point and its corresponding point situated inside the vehicle or on the surface.

Claim 28 (New): The telemetry system according to claim 27, wherein, in a case of drilling strings, the well point for communicating data is a well bottom.

Claim 29 (New): The telemetry system according to claim 27, wherein, in a case of drilling strings, comprising a garage configured to house the active vehicle or to house the passive vehicle together with the winding/unwinding device, which allows free circulation of sludge and contemporaneous protection of the vehicle.

Claim 30 (New): The telemetry system according to claim 27, wherein, in a case of drilling strings, the connection line connects the transmission and optional reception devices between a well bottom and its corresponding point inside the vehicle.

Claim 31 (New): The telemetry system according to claim 30, wherein the connection between the corresponding well point, situated inside the vehicle, and the surface terminal unit is effected by an RF (radio-frequency), or acoustic, or optical system.

Claim 32 (New): The telemetry system according to claim 30, wherein the connection between the corresponding well point, situated inside the vehicle, and the surface terminal unit is effected by wiping contacts.

Claim 33 (New): The telemetry system according to claim 27, wherein, in a case of drilling strings, the connecting line connects the transmission and optional reception devices between a well point and its corresponding point situated on the surface.

Claim 34 (New): An active vehicle, capable of moving inside pipes for unwinding and pulling a connection line containing electric conductors and/or one or more optical fibers configured to allow transmission and optional reception of data, comprising:

a winch of a line to be unwound or pulled;  
a head connector;  
means for supplying electric energy to the vehicle;  
electronic control and communication devices;  
locomotion devices for movement inside the pipe;  
anchoring devices configured to guarantee safe stoppage inside the pipe.

Claim 35 (New): The active vehicle according to claim 34, wherein the locomotion devices include a motor, gears, and at least one wheel that presses against an internal surface of the pipe and is forced by a spring.

Claim 36 (New): The active vehicle according to claim 34, wherein the vehicle is equipped with plural automation levels, ranging from purely tele-operated to completely autonomous.

Claim 37 (New): A passive vehicle for unwinding and pulling a connection line containing electric conductors and/or one or more optical fibers configured to allow transmission and optional reception of data, comprising:

a winch of a line to be unwound or pulled;  
means for supplying electric energy to the vehicle;  
electronic control and communication devices;  
anchoring devices configured to guarantee safe stoppage inside the pipe,  
the vehicle being connected, by a detachable deploying cable and a hooking/unhooking device, to a winding/unwinding device, configured to be situated inside a possible garage or outside the string.

Claim 38 (New): The vehicle according to claim 37, wherein the means for supplying electric power comprises batteries.

Claim 39 (New): The vehicle according to claim 37, wherein the means for supplying electric power comprises the connection line itself.

Claim 40 (New): The vehicle according to claim 37, further comprising a head connector configured to connect the vehicle itself to a garage for housing the vehicle.

Claim 41 (New): The vehicle according to claim 37, further comprising:  
measurement and detection devices;  
transmitting devices of television and/or acoustic images;  
means for activating devices;  
devices for moving parts.

Claim 42 (New): A garage for housing an active vehicle or a passive vehicle, installed under a top drive and screwed to a drilling string comprising, from inside to outside:

a container substantially cylindrically-shaped and truncated-conical at joints, in which the vehicle can be inserted, and

a wall substantially cylindrically-shaped and truncated-conical at the joints, which forms a space between the container and the wall of the garage allowing free circulation of drilling sludge,

the substantially cylindrically-shaped container being maintained in a desired position by supports.

Claim 43 (New): The garage according to claim 42, further comprising RF (radio-frequency) communication, or optical or acoustic systems.

Claim 44 (New): The garage according to claim 42, further comprising batteries configured to store energy for the housed vehicle.

Claim 45 (New): The garage according to claim 44, wherein the stored energy is supplied by an electric cable coming from the top drive, by use of wiping contacts.

Claim 46 (New): The garage according to claim 42, further comprising connection devices with the housed vehicle.

Claim 47 (New): A process for insertion of a new section of drilling string when an active vehicle is used, the process comprising:

suspending a flow of sludge;

exiting an active vehicle from a housing garage and inserting the vehicle in a last inserted string section;

inserting a new string section;

returning the vehicle to the garage with contemporaneous unwinding and pulling of a line;

clamping connection screw threads and re-activating of the flow of sludge.

Claim 48 (New): A process for insertion of a new section of drilling string when a passive vehicle is used, the process comprising:

suspending a flow of sludge;

lowering a passive vehicle, hung to a hooking/unhooking device positioned at an end of a cable unwound by a winch situated inside a garage, into a last inserted string section, releasing the hooking/unhooking device and recovering the vehicle with the winch;

inserting a new string section;

hooking the passive vehicle by the hooking/unhooking device positioned at an end of the cable run by the winch situated inside the garage and hoisting the vehicle back into the garage; and

clamping connection screw threads and re-activating the flow of sludge.

Claim 49 (New): A process for recovery of the connection line of the system according to claim 27, in a recovery phase of the string and consequently dismantling of the pipe forming the string, by commanding the active vehicle to descend or by lowering the passive vehicle into a section to be dismantled, with contemporaneous rewinding of a suitable length of connection line.

Claim 50 (New): A process for elimination of the connection line of the system according to claim 27, by extracting the active or passive vehicle from the string and using a winch on the surface together with a device for cutting the cable situated close to the communication devices at a well bottom.

Claim 51 (New): A process for elimination of the connection line of the system according to claim 27, in a recovery phase of the string and consequently dismantling of the pipe forming the string, effected by the active or passive vehicle equipped with an additional mechanical function that allows the vehicle to eject a section of the cable recovered from an

upper end of the vehicle itself, the part of the cable thus ejected being cut by the drilling operators or automatically by the vehicle itself.

Claim 52 (New): A process for elimination of the connection line of the system according to claim 27, by a container, which is sufficiently long for containing the line to be removed, lowered into an upper end of the string, the container being subsequently pushed by the flow of sludge and/or by its own weight in a direction of a lower end of the string, collecting inside all of the unwound cable in the string, the container stopping at the lower end of the string, where there is a blocking device.